

OneGradePlus Installation and Configuration Guide

This guide describes the installation, upgrade and configuration of the OneGradePlus Web Application and Import Service. Please refer to the separate **OneGrade DB_Client Upgrade Guide** for details about installing and updating the SQL Server database and Windows Application. Further details about the Import Service are in the **Combined Import and Scheduler User Guide**.

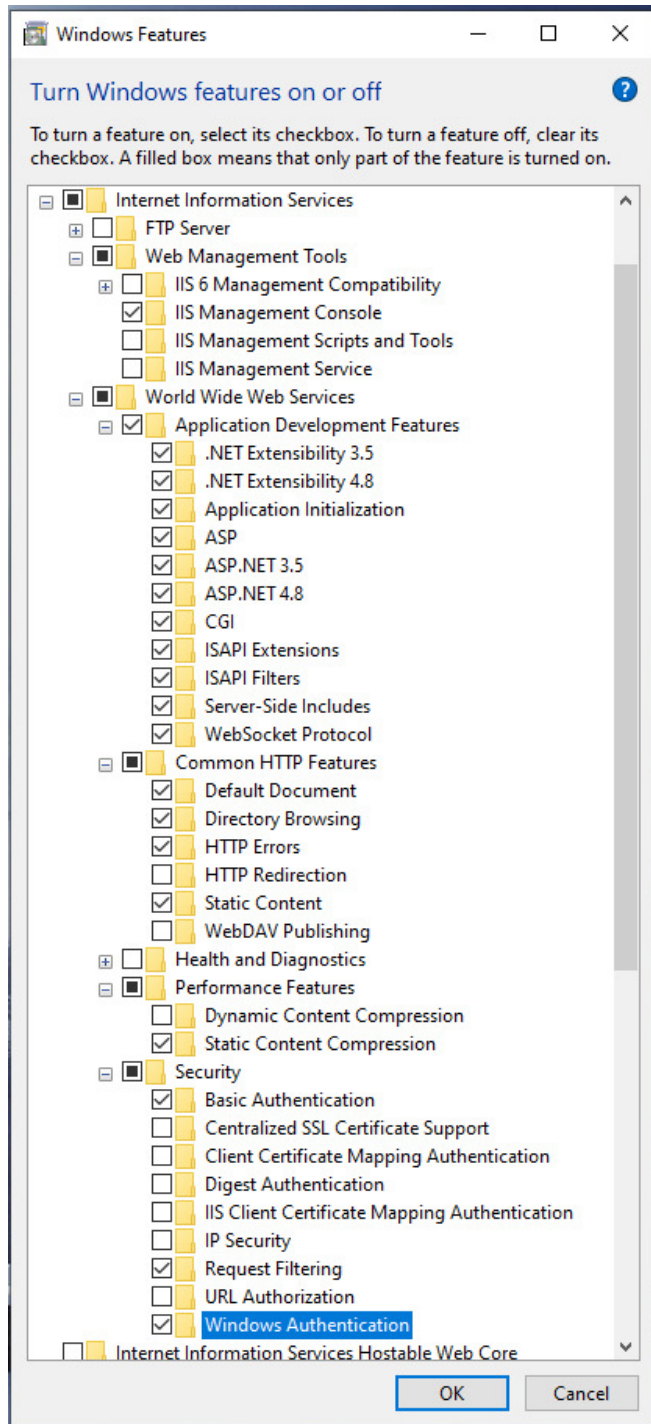
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IIS Requirements

OneGradePlus requires Microsoft Internet Information Services (IIS). Using Windows Features, turn on the following features:



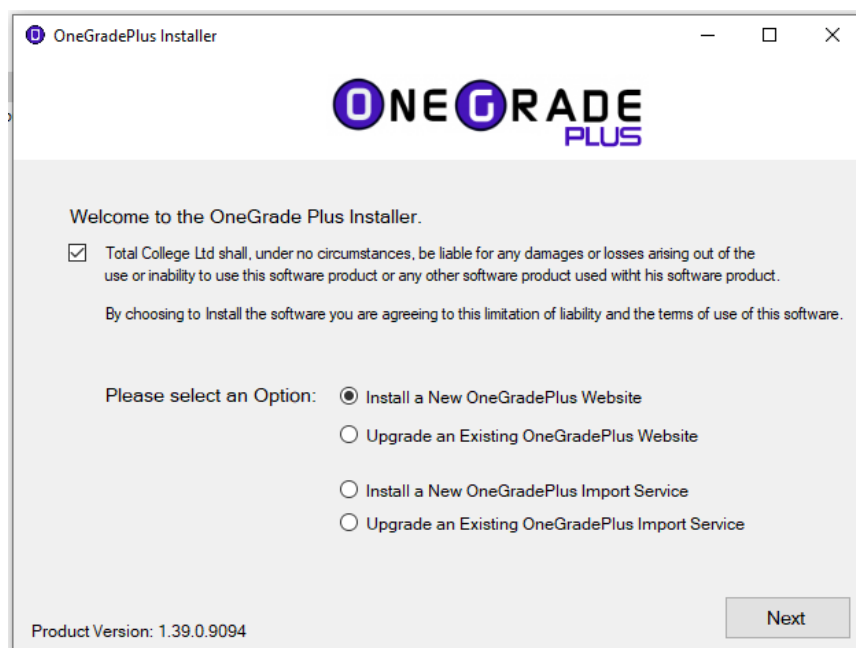
Note: the minimum .NET version required for OneGradePlus is 4.8.0.

Installation

After extracting the installation files locally on the server on which IIS is installed, run the file OneGradePlusInstaller.exe:

	LogFiles	30/01/2024 14:26	File folder	
	OneGradePlus-Website	30/01/2024 14:26	File folder	
	Microsoft.Web.Administration.dll	08/03/2016 10:28	Application exten...	144 KB
	OneGradePlusInstaller.exe	30/01/2024 13:53	Application	316 KB
	OneGradePlusInstaller.exe.config	19/09/2023 15:23	XML Configuratio...	1 KB

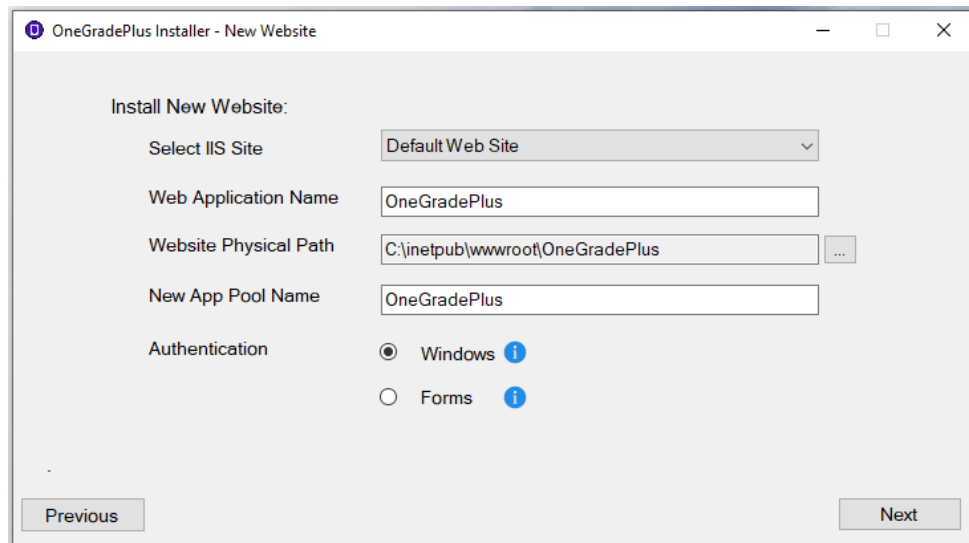
After ticking the Agreement checkbox, you will be asked to Install or Upgrade the OneGradePlus Website. Select to Install the OneGradePlus Website and press Next:



Note: Installing and Upgrading the OneGradePlus Import Service is described later in this document.

On the next step, you will be asked to select the IIS WebSite to install the OneGradePlus Web Application under. You may alter the name, file path and application pool name as necessary. You may also select to use Windows Authentication (recommended) or Forms Authentication. Note that setting the authentication requires some extra configuration within IIS after the installation. Full details are described later in this document.

Note: If possible, it is worth considering setting up a separate IIS Web Site within IIS for OneGradePlus as it will cause minimal disruption to other web applications if it needs to be restarted.



OneGradePlus Installer - New Website

Install New Website:

Select IIS Site: Default Web Site

Web Application Name: OneGradePlus

Website Physical Path: C:\inetpub\wwwroot\OneGradePlus

New App Pool Name: OneGradePlus

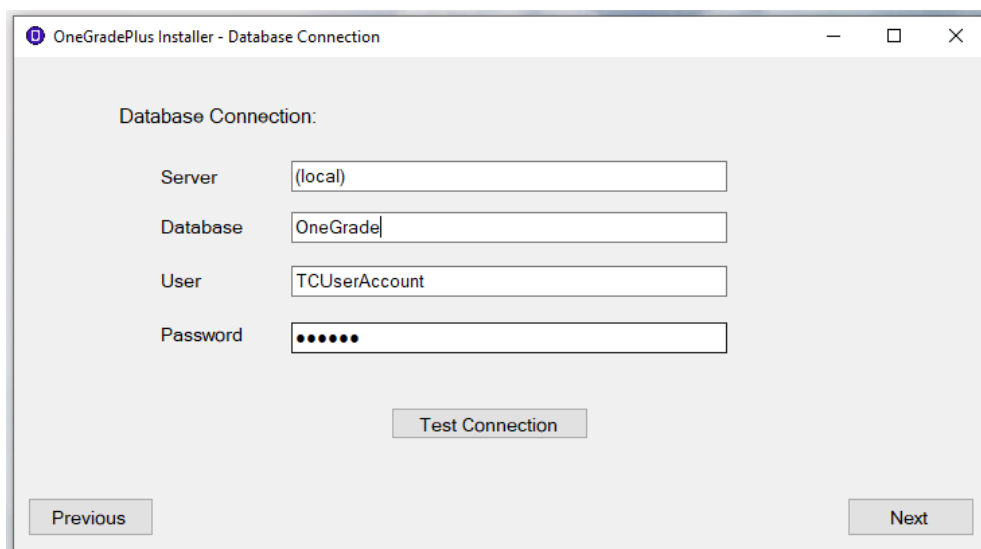
Authentication:

☒ Windows

☐ Forms

Previous Next

Pressing Next opens the database connection step:



OneGradePlus Installer - Database Connection

Database Connection:

Server: (local)

Database: OneGrade

User: TCUserAccount

Password:

Test Connection

Previous Next

Enter the name of the SQL Server which holds the database(s) and the connection details.

The SQL server name will be:

For a named server (database not on an instance), enter SERVERNAME

For a named server (database on an instance), enter SERVERNAME\INSTANCENAME

For an IP address (database not on an instance, default port), enter 99.99.99.99

For an IP address (database not an instance, port 1400), enter 99.99.99.99,1400

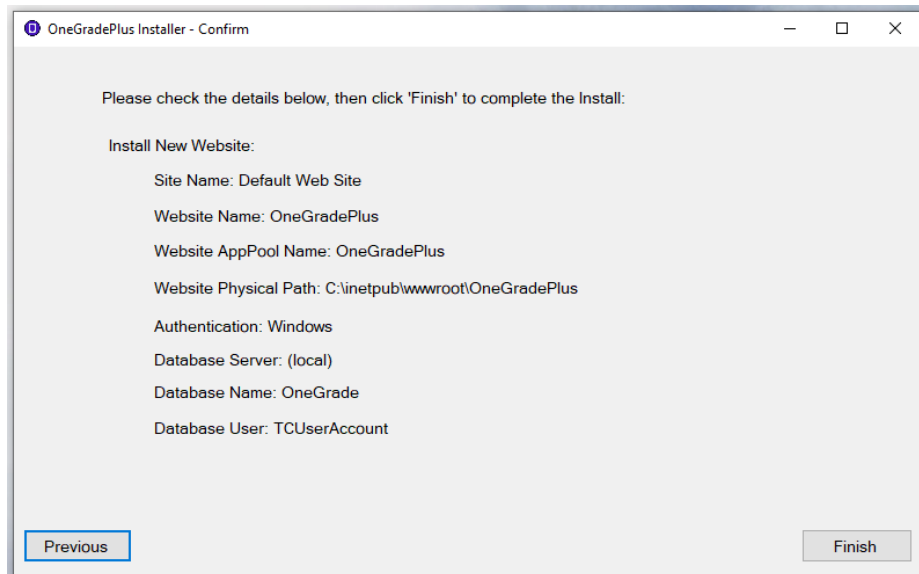
For an IP address (database on an instance, port 1400) enter 99.99.99.99\INSTANCENAME,1400

By default, the TCUserAccount is used to connect to the database(s). The password will be held in an encrypted form against the IIS Website Application Setting "OGP_CONNECTION_PASSWORD".

Note: Any number of OneGradePlus web applications may be installed. For instance you may wish to create a OneGradePlusTraining web application connected to a OneGradeTraining

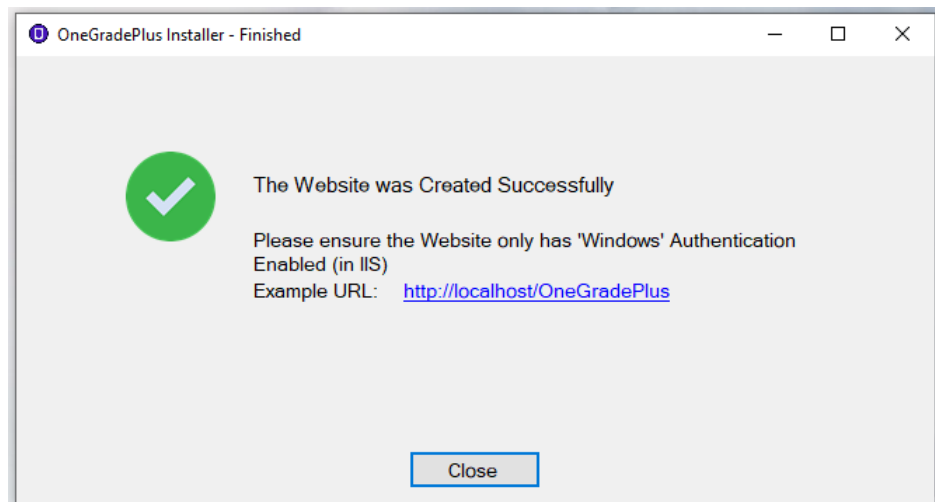
OneGradePlus Installation and Configuration

The final step is to confirm the installation choices that have been made prior to creating the OneGradePlus web site:



Pressing Finish will begin the installation.

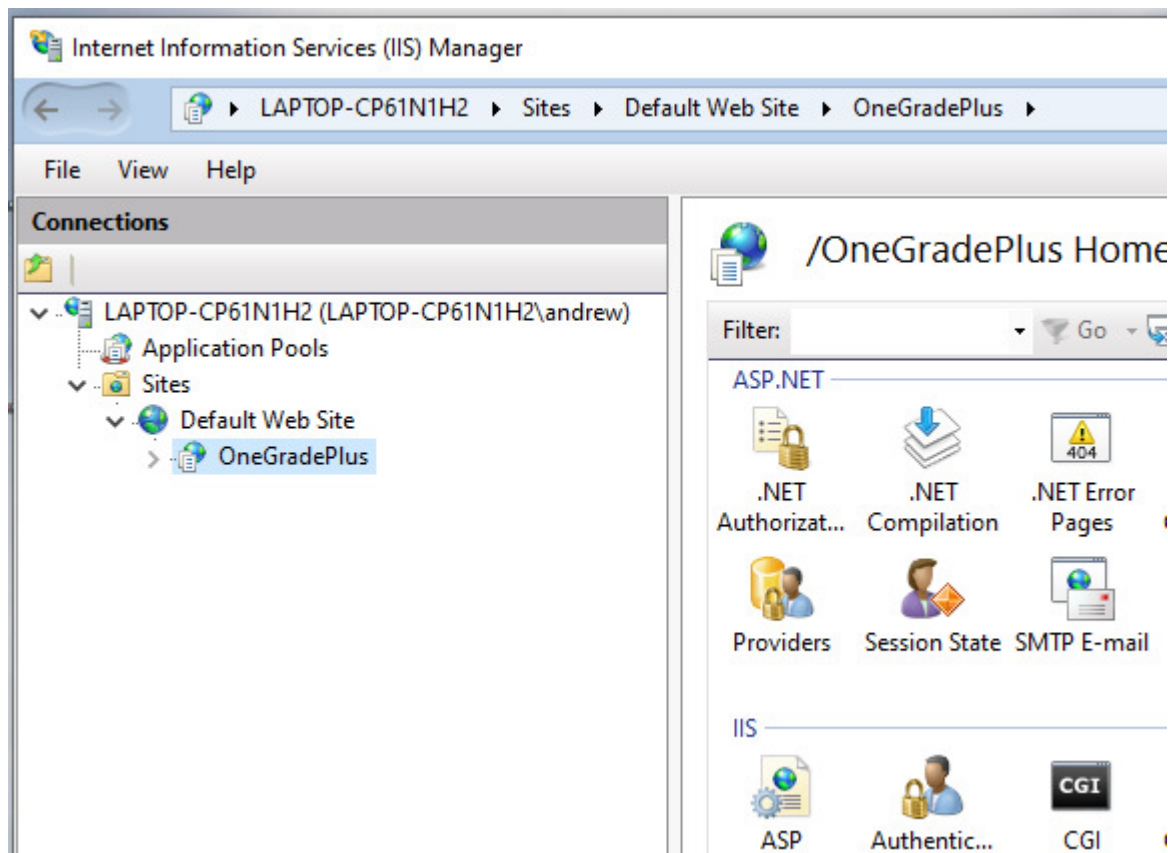
After successful installation, the following message will be displayed:



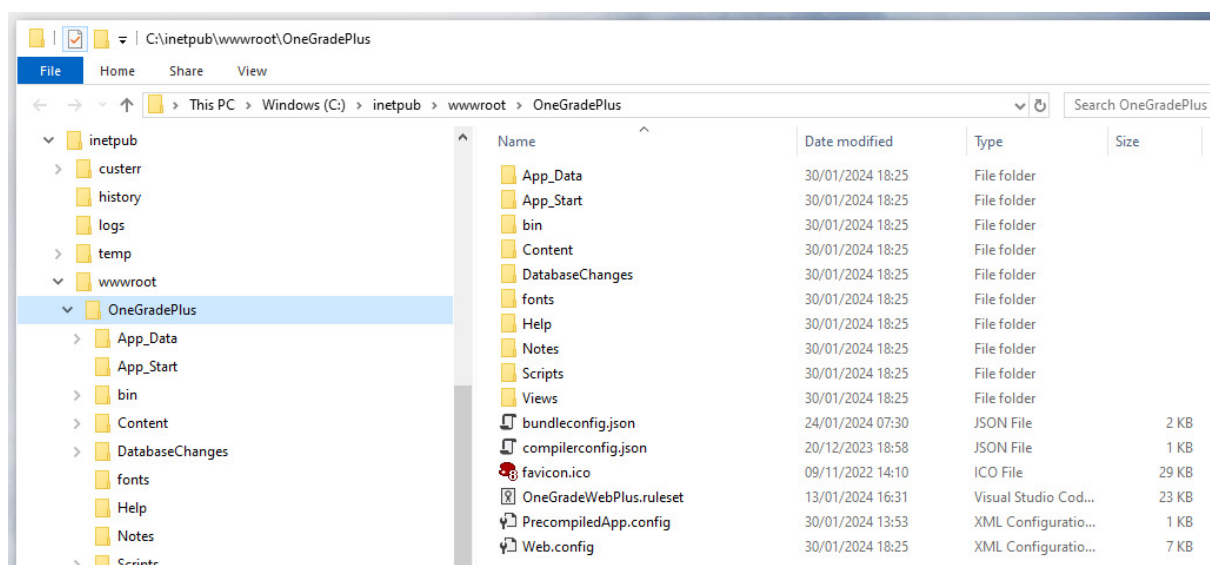
Note: After installation, within IIS, recycle the Application Pool.

Viewing the Web Application(s) in IIS after Installation

In the installation example, OneGradePlus has been installed under the Default Web Site. When the IIS Manager is opened, this is how it is presented:

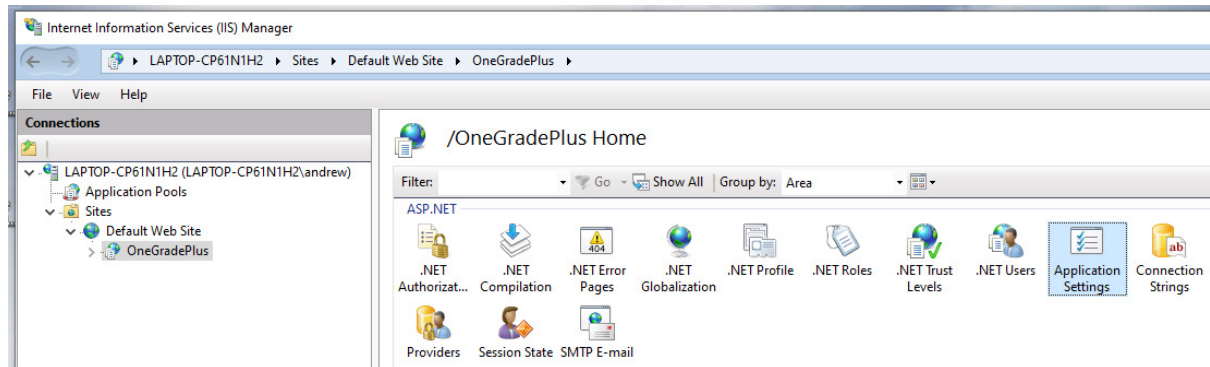


Within Windows file explorer, under the installation file path C:\inetpub\wwwroot, the Web Application Files have been installed under the “OneGradePlus” folder:



Database Connection

The OneGrade Web Application connects to a SQL Server database using settings stored in its web.config file. The web.config file can be opened in notepad and edited directly, or more safely and practically through the Application Settings using the IIS Manager.



Clicking the Application Settings, the following database connection properties can be edited:

- OGP_CONNECTION_DATABASE (the database name)
- OGP_CONNECTION_SERVER (the name (or IP address) of the SQL Server)
- OGP_CONNECTION_USER (the user account being used to connect to the database)
- OGP_CONNECTION_PASSWORD (the password for the user account above)

Alternatively, you can fill in a complete connection string by using the following property

- OGP_CONNECTION_STRING

(Completing OGP_CONNECTION_STRING will over-ride the individual settings above. For example if you wish to use trusted_connection to connect to the SQL Server database.)

Note: After making any changes to a web application within IIS, recycle the Application Pool.

Additional Properties

There are a series of timeout variables that may be adjusted:

- OGP_DATALOAD_TIMEOUT_SECONDS (timeout used to load grids of data)
- OGP_DATASAVE_TIMEOUT_SECONDS (timeout used to save data)
- OGP_SEARCH_TIMEOUT_SECONDS (timeout used by the Search facilities)
- OGP_TIMEOUT_LOGOUT_SECONDS (inactivity timeout)

Increasing these timeouts may solve issues where the database server or network connection is suffering performance issues.

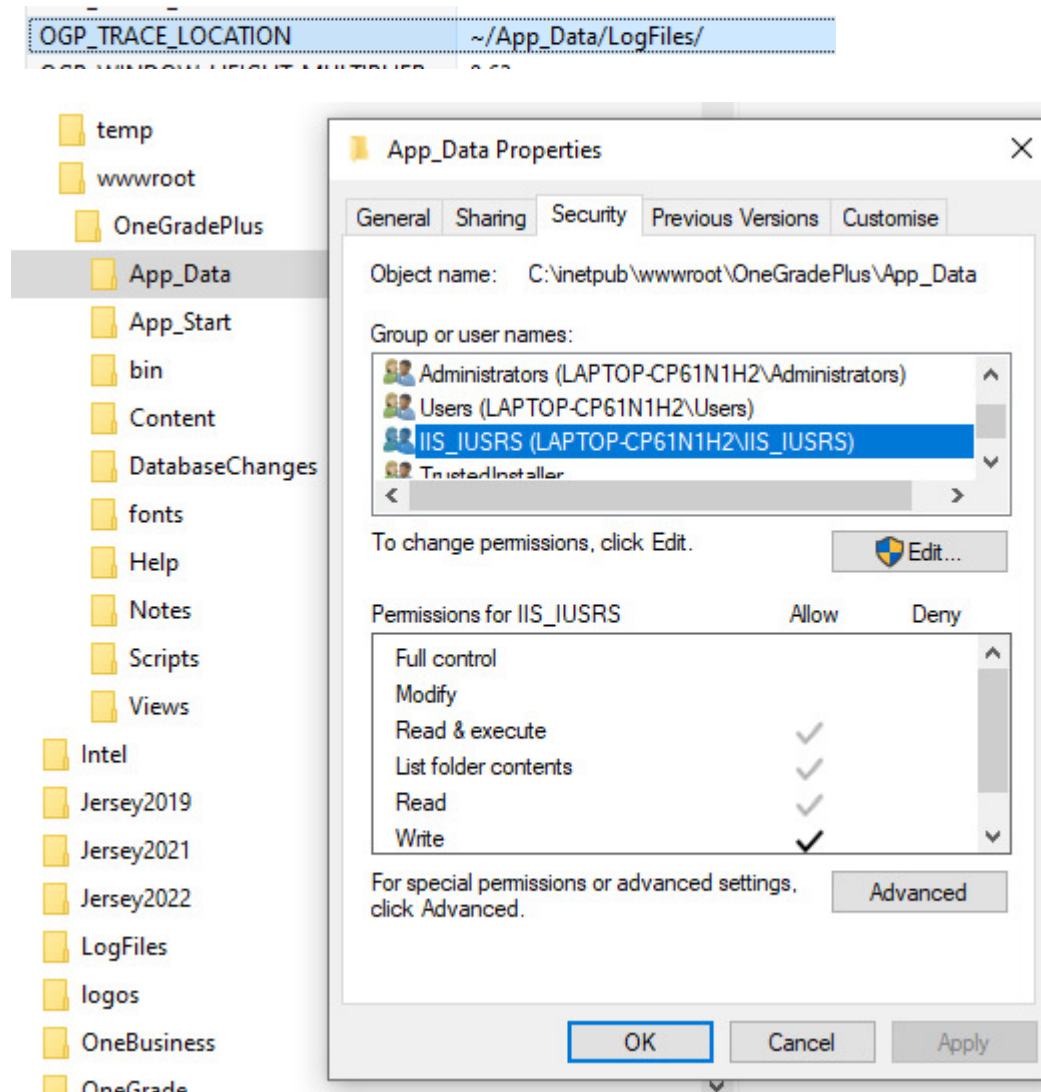
The authentication mode is used by OneGradePlus to attempt to start using windows authentication or User and Password authentication.

- OGP_AUTH_MODE (**WINDOWS** or **FORMS**)

OneGradePlus has a useful error tracing feature to help diagnose any issues that may arise.

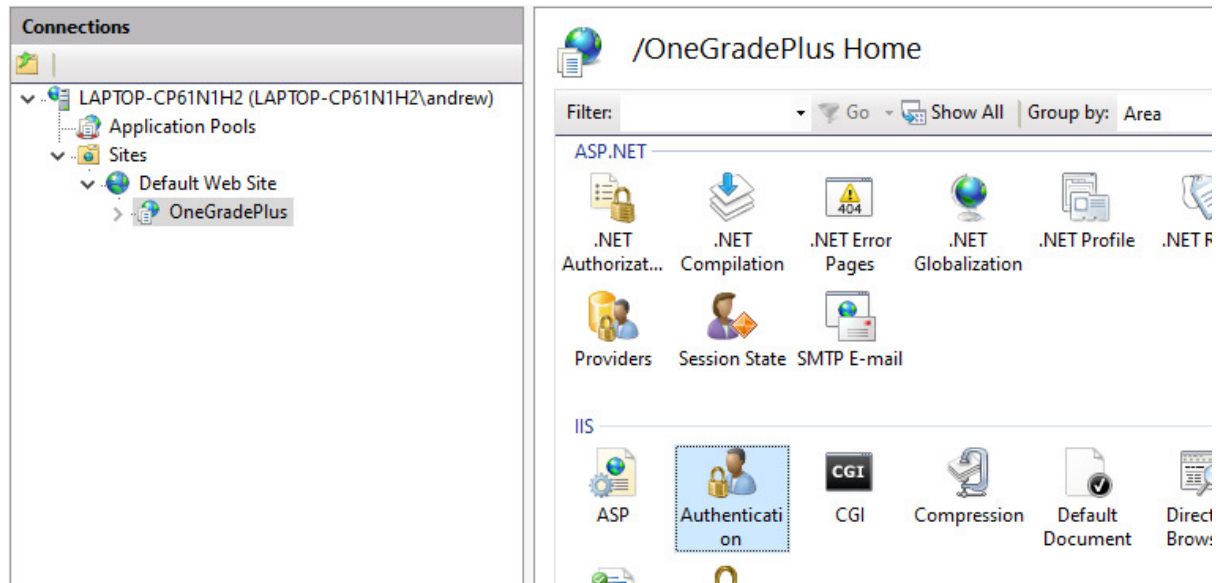
- OGP_TRACE_LOCATION (the location (on the IIS server) where the trace files are kept)
- OGP_TRACE_KEEPPOR (the number of days to keep trace files for (the default is 7)
- OGP_TRACE_ALL (use 0 to just record errors or 1 to record errors and trace)

In order to use the tracing feature, it is important that the account under which IIS is running (usually the IIS_IUSRS account) has Write access to the folder within which the log files will be written to and stored. E.g.



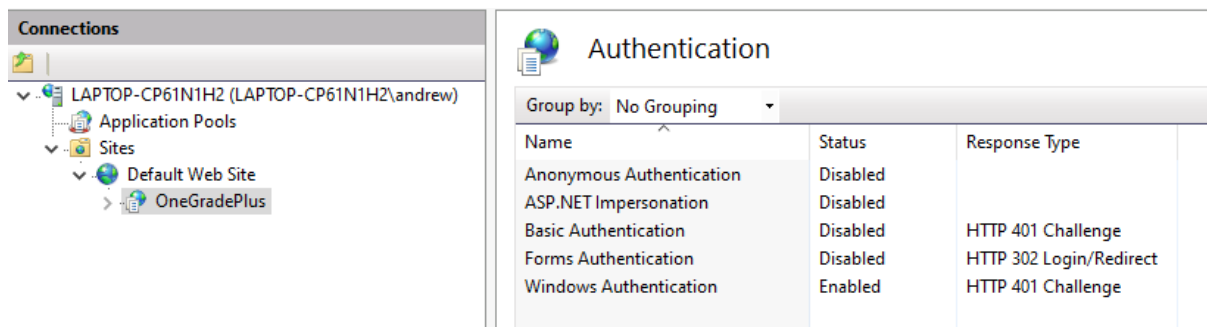
Authentication

OneGrade Plus currently supports Windows Authentication and Forms-based login. These settings are accessed via the IIS Manager. Select the Web Application and click the Authentication settings:



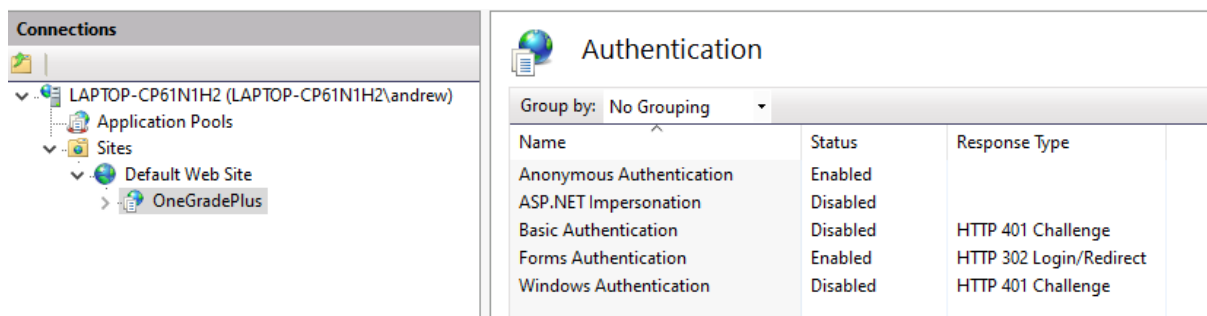
Windows Authentication Settings

Ensure that the OGP_AUTH_MODE value is WINDOWS. Enable Windows Authentication. Ensure all other authentication settings are disabled:



Forms Authentication Settings

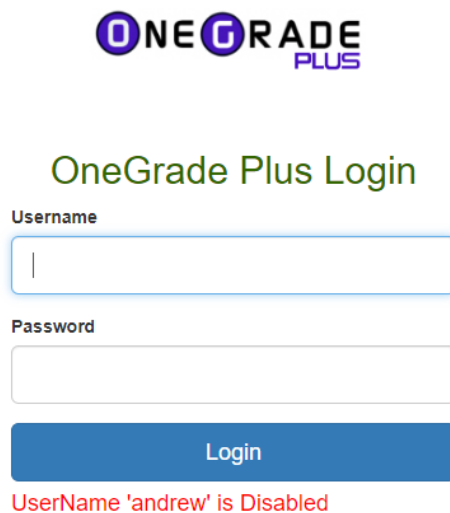
Ensure that the OGP_AUTH_MODE value is FORMS. Enable Anonymous Authentication and Forms Authentication. Ensure all other authentication settings are disabled:



Note: We recommend that Windows Authentication is enabled for users to log into OneGrade Web. It is advisable to set a password for the administrator account as a fall-back. Using Forms authentication for all users is not recommended and will be difficult to manage.

Note: After making any changes to a web application within IIS, recycle the Application Pool.

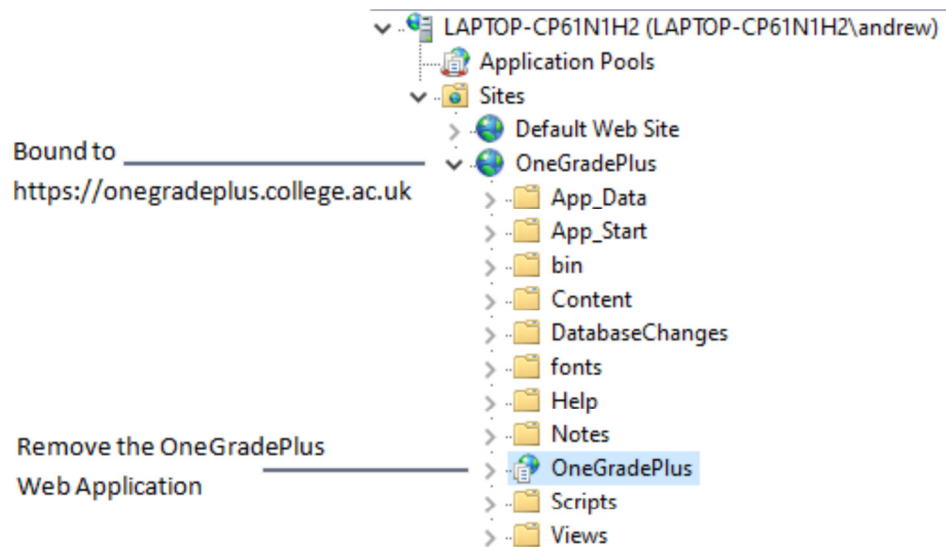
If Windows Authentication is switched on, and a user attempting to open OneGradePlus has not been recognised or their User Account has been disabled within the OneGrade Windows administration application, they will be presented with a login screen. If the account has been disabled, a message will be displayed.



The login screen features the OneGrade Plus logo at the top. Below it, the title "OneGrade Plus Login" is displayed in green. There are two input fields: "Username" and "Password". The "Username" field contains a single character, and the "Password" field is empty. A blue "Login" button is positioned below the password field. At the bottom, a red error message states "UserName 'andrew' is Disabled".

Binding to https

If you bind the WebSite to https, and you link the files to the WebSite, it is advisable to remove the WebApplication to prevent errors occurring within OneGradePlus:



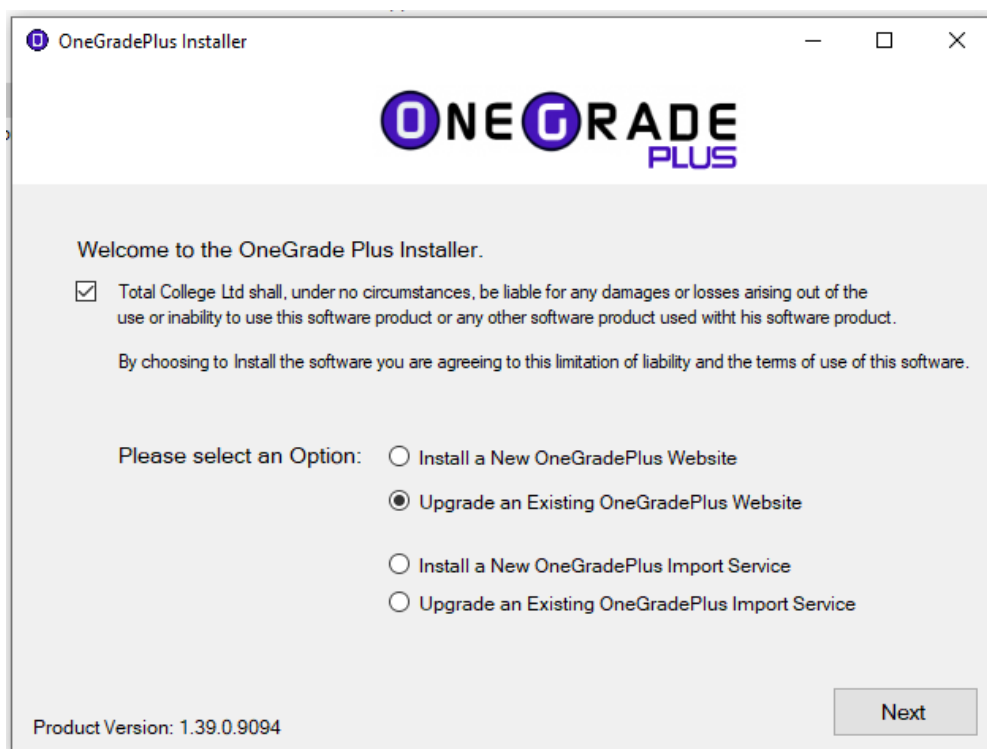
Note that if you create a Web Site called OneGradePlus within IIS, temporarily assign it to another Application Pool when you create it. This is because if you then install the Web Application as OneGradePlus within the WebSite OneGradePlus, it will want to create an Application Pool called OneGradePlus. After Installation, reassign the OneGradePlus Web Site to the OneGradePlus Application Pool.

Upgrade

After extracting the installation files locally on the server on which IIS is installed, run the file OneGradePlusInstaller.exe:

	LogFiles	30/01/2024 14:26	File folder	
	OneGradePlus-Website	30/01/2024 14:26	File folder	
	Microsoft.Web.Administration.dll	08/03/2016 10:28	Application exten...	144 KB
	OneGradePlusInstaller.exe	30/01/2024 13:53	Application	316 KB
	OneGradePlusInstaller.exe.config	19/09/2023 15:23	XML Configuratio...	1 KB

After ticking the Agreement checkbox and pressing next, you will be asked to Install or Upgrade the OneGradePlus Website. Select to Upgrade the OneGradePlus Website and press Next:

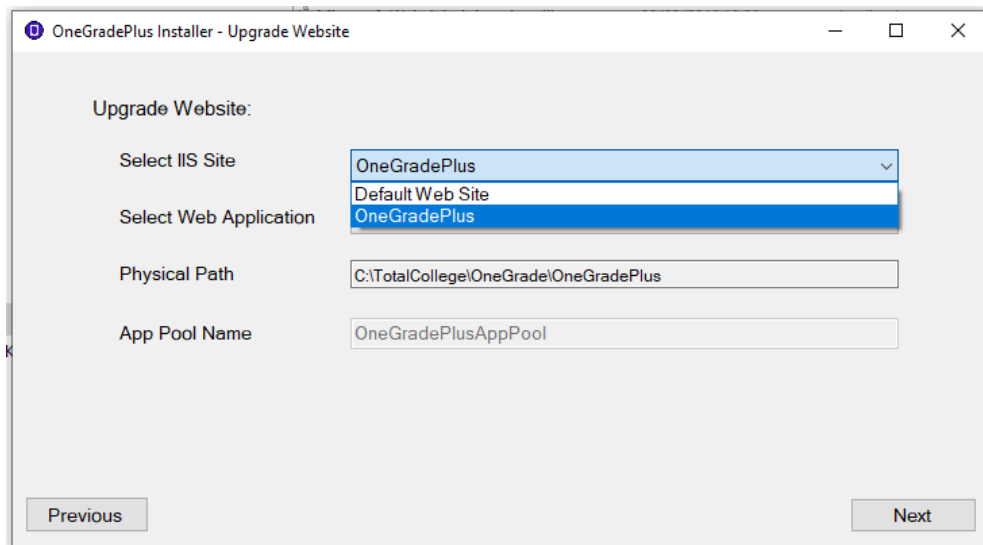


Note: Installing and Upgrading the OneGradePlus Import Service is described later in this document.

Note that only one web application may be upgraded at a time, so if you have multiple OneGradePlus web applications (e.g. one Live and one for Training), you must follow this procedure multiple times.

OneGradePlus Installation and Configuration

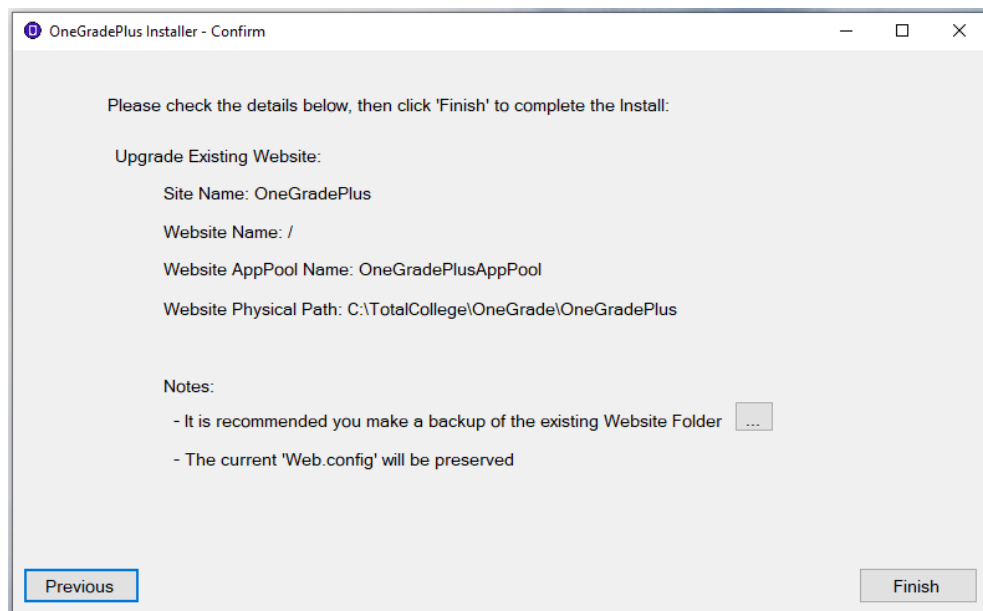
The next step will allow you to choose the web application to upgrade. The installation settings are stored, so the upgrader will display the same settings as used by the installer. Select the IIS site followed by the web application itself.



After selecting the IIS Site and Web site to upgrade, press Next.

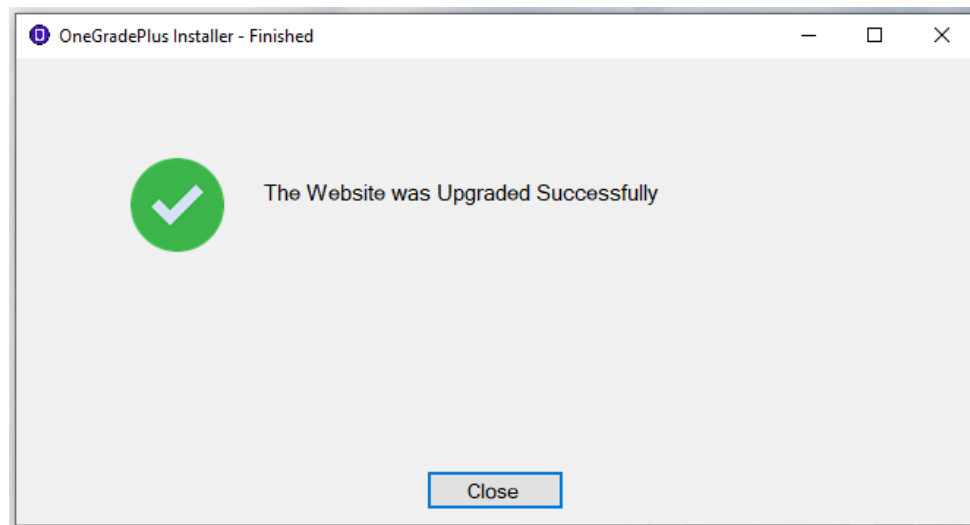
We recommend for safety that you make a backup of the existing website files - you can use the ... button to open the Web Application folder.

The final step is confirmation of the upgrade. Press Finish to begin the upgrade.



OneGradePlus Installation and Configuration

After successful installation, the following message will be displayed:



Note: After upgrading, within IIS, recycle the Application Pool.

Important - Configuring OneGradePlus for Use after Installation

Once OneGradePlus has been installed, use the OneGrade Windows Application to complete the following steps:

1. Enter the OneGradePlus Licence Key into the OneGrade Windows Application. You will need to contact Total College Ltd. for a Licence Key if you have not been sent one already.
2. Open the System Setting Values screen (Main Menu | System Maintenance | System Settings - Values). Enter the OneGradePlus Root URL (so the website can be opened from the Home screen). Enter the College Structure UDF (so that a college structure level can be used in OneGradePlus e.g. Enrolment|UserDefinedString1).
3. Open the In Year Grade Web Settings screen (Main Menu | System Maintenance | In Year Grade Web Settings). Rename and show/hide the In Year Grade settings as necessary.
4. Open the User Defined Fields screen (Main Menu | System Maintenance | User Defined Fields). Rename the fields with a tablename of "n/a" as applicable.
5. Import Staff Users / Student Users / StaffTeachingGroups as necessary. You may manually create Staff Users – if you just need to create a few! You may need to alter the Enrolment or Course import dataset to cater for the College Structure UDF as described in Step 2. After any imports, you will need to re-summarise the data (Estimated vs Actual Analysis / English & Maths Analysis screens) and re-index the database (Home screen)
6. Refresh the Windows Application Home screen to display the new licence keys.
7. It is recommended to recycle the OneGradePlus Application Pool(s) within IIS after an install / upgrade.
8. After making changes within the Windows Application, you may need to refresh the local cache within OneGradePlus (if you have kept your browser open). To do this, within OneGradePlus, select "Clear Session Cache" from the dropdown alongside your name in the top right corner of the screen.

Configuration

A summary of features required to be configured for OneGradePlus using the OneGrade Windows Application are summarised below:

Importing

Because all enrolments can be included in the 5, analysis is no longer restricted to just Level 2 and Level 3 qualifications. Therefore, your import datasets should import all students and enrolments at all levels across college for whom you wish to record InYear progress. The StaffTeachingGroup, StaffUser and StudentUser imports support OneGradePlus.

Pass/Fail Qualifications – Grades and Points

From this facility – available from the Reference Data menu, there is a new flag – "View on Website". Those Grades set to True will be available for selection in OneGradePlus when recording InYear progression.

User Defined Fields

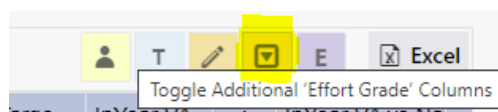
A set of “...Target Grade” and “Student Info...” User Defined Fields is available to define how column headings / text is displayed in OneGradePlus.

System Setting Flags

The “Allow English / Maths Starting Grades to be entered into OneGrade Web” and “Show InYear Effort Grades in Web” system settings are available to support OneGradePlus.

Effort Grades

Effort Grades can be maintained within the OneGrade Windows Application. From the main menu, select Reference Data | InYear Grade – Effort. The system setting flag “Show InYear Effort Grades in Web” must be set to True. These are then available from within OneGradePlus:



System Setting Values

The location of the OneGradePlus website and the college structure used by OneGradePlus can be configured using the System Setting Values. The System Setting Values “WebPlusShowInYearNotes” and “WebPlusShowEffortGrades” can be set to “YES” to show Notes and Effort Grades respectively by default. The system setting value “WebPlusImpersonateStudentRef” can be set with the Student Ref of a test student, so any member of staff can see what a student would see when a student logs into OneGradePlus.

InYear Grade Settings

InYear progress grades can be recorded up to 12 times per year. Use this facility to define how many times you wish to record InYear progress grades and the column heading names.

User Accounts

For tutors to use OneGradePlus fully, a User Account must be linked to a member of staff. This will allow searches (College Structure and Teaching Groups) to be saved.

Links to External Website from OneGradePlus

From within the OneGradePlus, pressing the student icon will open an external website in a new tab if the System Settings Values WebPlusExternalStudentURL and WebPlusExternalStudentText are configured.

WebPlusExternalStudentURL

This is the URL that can be used to open an external system from within OneGradePlus; for example an ILP system. A URL might look like:

http://college.ac.uk/ILPSystem/ilp/information/details.aspx?academicyearid={AcademicYear}&pmsstudentid={StudentUserDefinedString3}

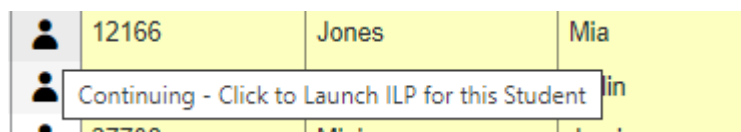
The following parameters can be used:

{AcademicYear}	format: yyyy (e.g. 2324)
{AcademicYearID}	format: yy/yy (e.g. 23/24)
{StudentRef}	
{StudentUserDefinedStringX}	where X is a number from 1 to 8 – e.g. StudentUserDefinedString5

{StudentUserDefinedStringX} is supported because some ILP Systems only accept an encoded Student Reference, so this way the encoded Student Reference can be imported as a Student User Defined field into OneGrade and then used within the URL string. You will not want to display this Student User defined field within OneGradePlus for security reasons, so in the OneGrade Windows Application, User Defined Fields maintenance screen, leave the User Defined Name blank.

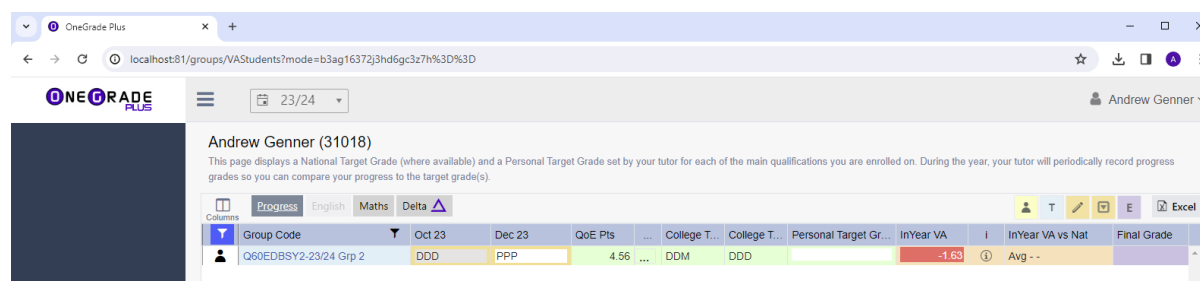
WebPlusExternalStudentText

This is the text that appears when you hover over the Student icon at the left side of the grid to indicate the ILP System you can open by clicking on the icon.



Student Access to OneGradePlus

Student Accounts are imported into the OneGrade Windows Application. Students log into the same OneGradePlus Application as Staff in the same way. Student accounts are restricted to a single page to view selected read-only progress information:



Linking to OneGradePlus from other Applications

To open a Teaching Group within OneGradePlus, if your application supports the generation of a URL, you should form a URL as follows:

`<WebsiteURL>/DisplayGroupCode?AcademicYear=<AcademicYearID>&GroupCode=<GroupCode>`

The `<AcademicYearID>` parameter will accept AcademicYears in the format `yy/yy` or `yyyy` (e.g. `23/24` or `2324`)

The `<GroupCode>` parameter will accept the Group Code in text form (e.g. `EngGCSEGroupA`, `801430`, `B56_100_A` etc.) Note that there are no quotation marks or other delimiters around this text.

e.g.

`https://onegrade.college.ac.uk/DisplayGroupCode?AcademicYear=23/24&GroupCode=P294610_A`
`http://onegrade.college.ac.uk/DisplayGroupCode?AcademicYear=2324&GroupCode=EngGCSEGroupA`

If you don't pass the `<GroupCode>` into the URL, it will open OneGradePlus on the homepage for the Academic Year specified:

`<WebsiteURL>/DisplayGroupCode?AcademicYear=<AcademicYearID>`

e.g.

`https://onegrade.college.ac.uk/DisplayGroupCode?AcademicYear=22/23`
`http://onegrade.college.ac.uk/DisplayGroupCode?AcademicYear=2223`

Installing and Upgrading the OneGrade Import Service

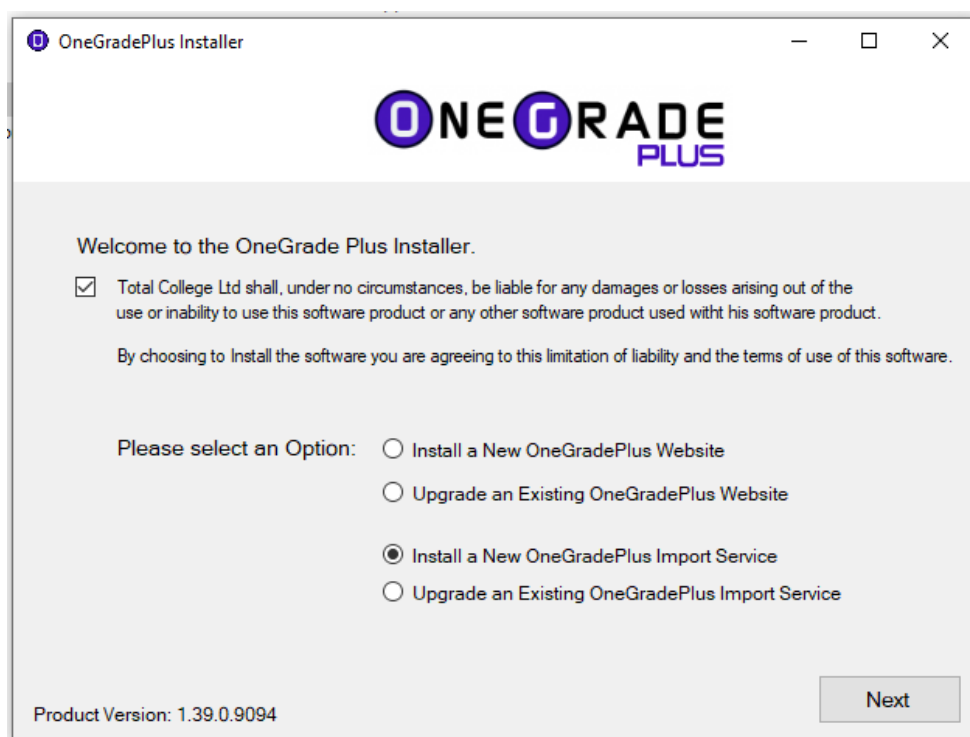
The OneGrade Import Service is a windows service that can be scheduled to automatically import and summarise data on a regular basis. Further details can be found in the **Combined Import and Scheduler User Guide**.

OneGrade Import Service Installation

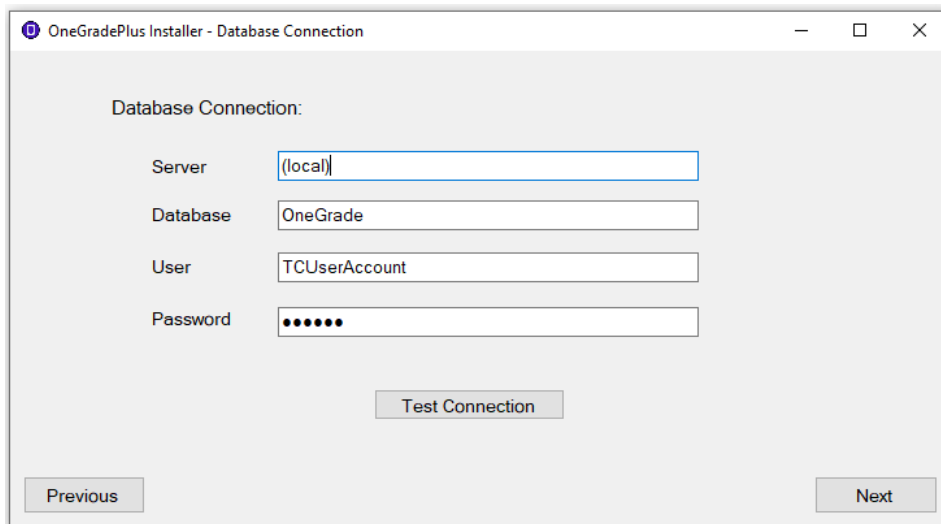
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	LogFiles	30/01/2024 14:26	File folder	
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	OneGradePlusInstaller.exe	30/01/2024 13:53	Application	316 KB
	OneGradePlusInstaller.exe.config	19/09/2023 15:23	XML Configuratio...	1 KB

After ticking the Agreement checkbox, you will be asked to Install or Upgrade the OneGradePlus Import Service. Select to Install the OneGradePlus Import Service and press Next:



The next step is to enter the connection details to the SQL Server OneGrade database. Note that the OneGrade Import service does not have to be on the same server as the IIS OneGradePlus Website or the SQL Server database.



The image shows a screenshot of the 'OneGradePlus Installer - Database Connection' window. It contains four input fields: 'Server' with the value '(local)', 'Database' with the value 'OneGrade', 'User' with the value 'TCUserAccount', and 'Password' with masked characters. Below these fields is a 'Test Connection' button. At the bottom of the window are 'Previous' and 'Next' buttons.

Enter the name of the SQL Server which holds the database(s) and the connection details.

The SQL server name will be:

For a named server (database not on an instance), enter SERVERNAME

For a named server (database on an instance), enter SERVERNAME\INSTANCENAME

For an IP address (database not on an instance, default port), enter 99.99.99.99

For an IP address (database not an instance, port 1400), enter 99.99.99.99,1400

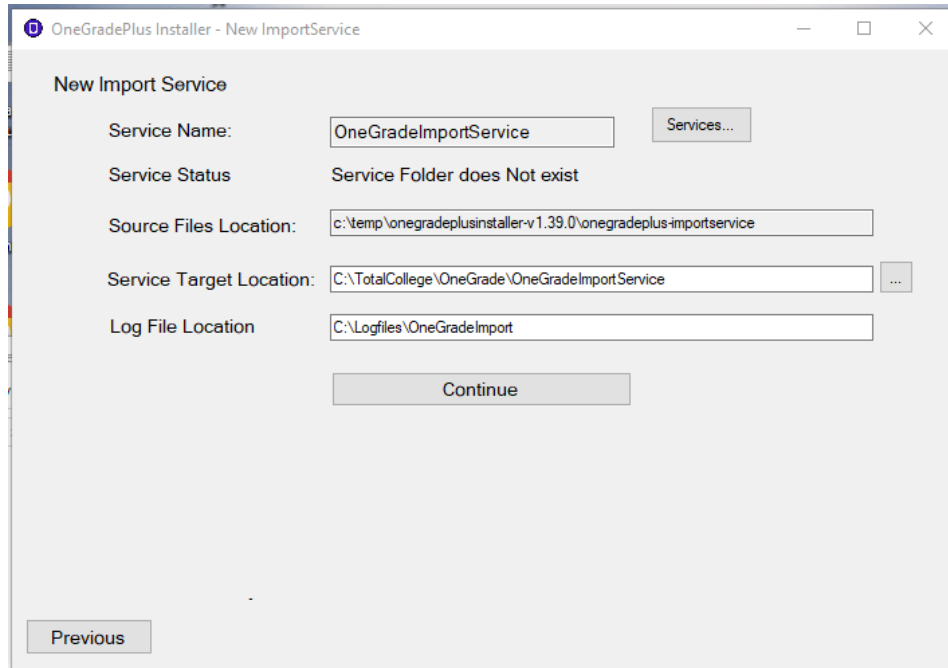
For an IP address (database on an instance, port 1400) enter 99.99.99.99\INSTANCENAME,1400

By default, the TCUserAccount is used to connect to the database(s). The password will be held in an encrypted form within the OneGradeImportService.exe.config in the same location as the OneGradeImportService.exe.

Once the database connection details have been entered and the connection tested, press Next.

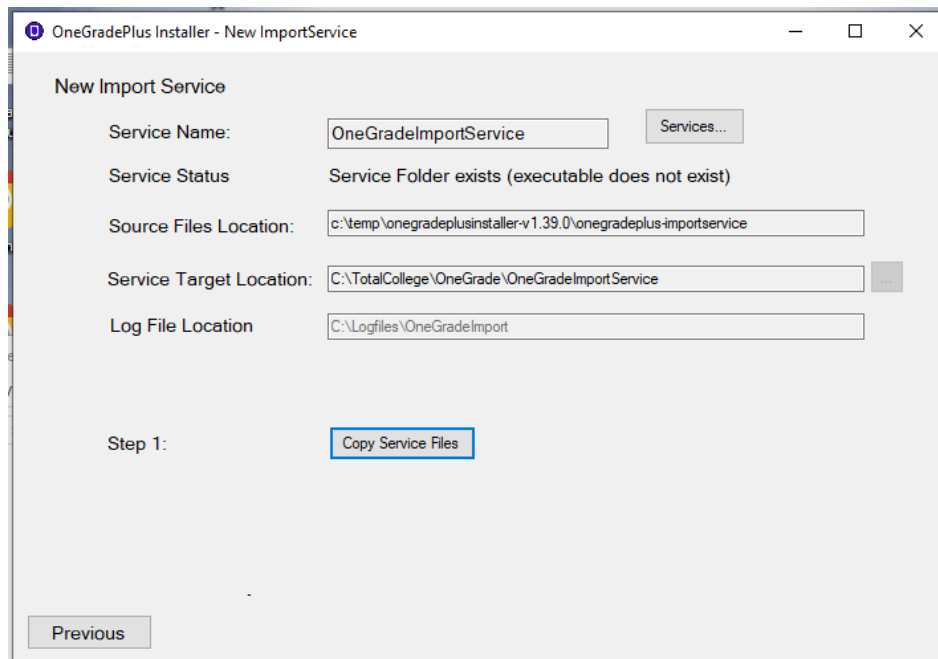
OneGradePlus Installation and Configuration

This step will install the Service to the selected location on the current server. Note also that the location of the Log files may also be changed here from the defaults if necessary. (The log files may be useful to help diagnose any issues with the OneGradePlus Import Service. Log files are automatically removed after 30 days.)



The OneGradePlus Import Service is a 3-step process.

Step 1: Press "Copy Service Files":



On Success, Step 2: "Install Service":

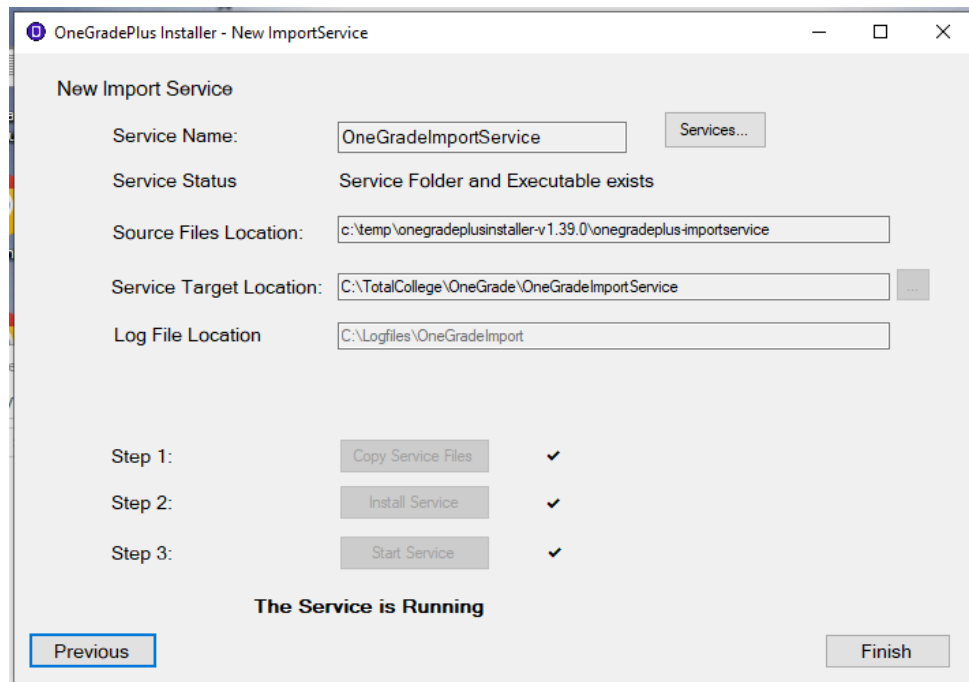
The screenshot shows the 'OneGradePlus Installer - New ImportService' window. The 'Service Name' is 'OneGradeImportService'. The 'Service Status' is 'Service Folder and Executable exists'. The 'Source Files Location' is 'c:\temp\onegradeplusinstaller-v1.39.0\onegradeplus-importservice'. The 'Service Target Location' is 'C:\TotalCollege\OneGrade\OneGradeImportService'. The 'Log File Location' is 'C:\Logfiles\OneGradeImport'. The progress bar shows 'Step 1: Copy Service Files' as completed with a checkmark. 'Step 2: Install Service' is the current step, highlighted with a blue border. A 'Previous' button is at the bottom left.

On Success, Step 3: "Start Service":

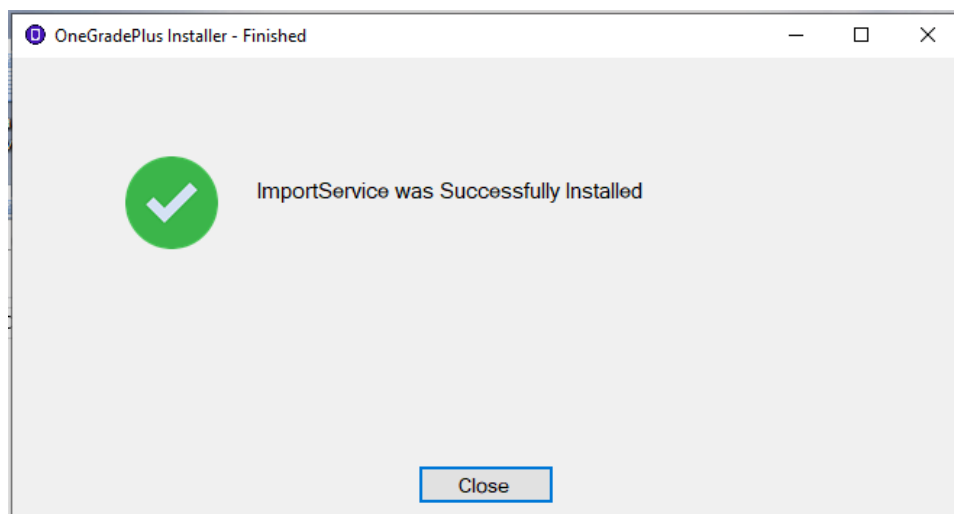
The screenshot shows the 'OneGradePlus Installer - New ImportService' window. The 'Service Name' is 'OneGradeImportService'. The 'Service Status' is 'Service Folder and Executable exists'. The 'Source Files Location' is 'c:\temp\onegradeplusinstaller-v1.39.0\onegradeplus-importservice'. The 'Service Target Location' is 'C:\TotalCollege\OneGrade\OneGradeImportService'. The 'Log File Location' is 'C:\Logfiles\OneGradeImport'. The progress bar shows 'Step 1: Copy Service Files' and 'Step 2: Install Service' as completed with checkmarks. 'Step 3: Start Service' is the current step, highlighted with a blue border. A 'Previous' button is at the bottom left.

OneGradePlus Installation and Configuration

Once the Service has started, a message will be displayed and the Finish button will show:

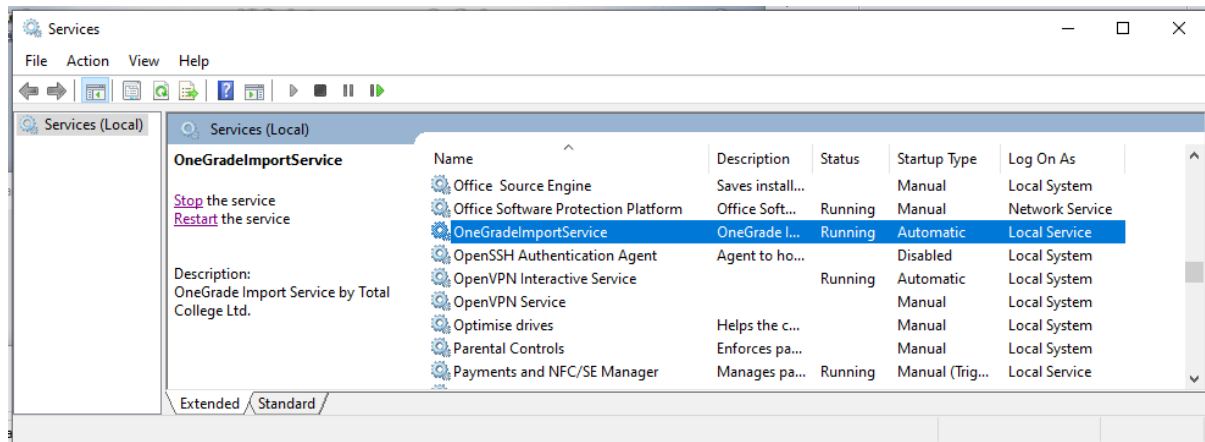


Press Finish to complete the installation process:

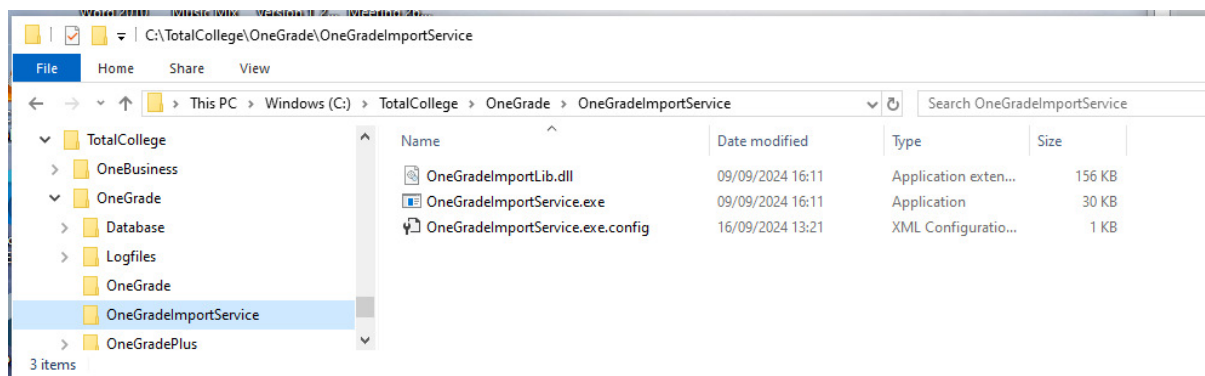


Configuring the OneGrade Import Service after Installation

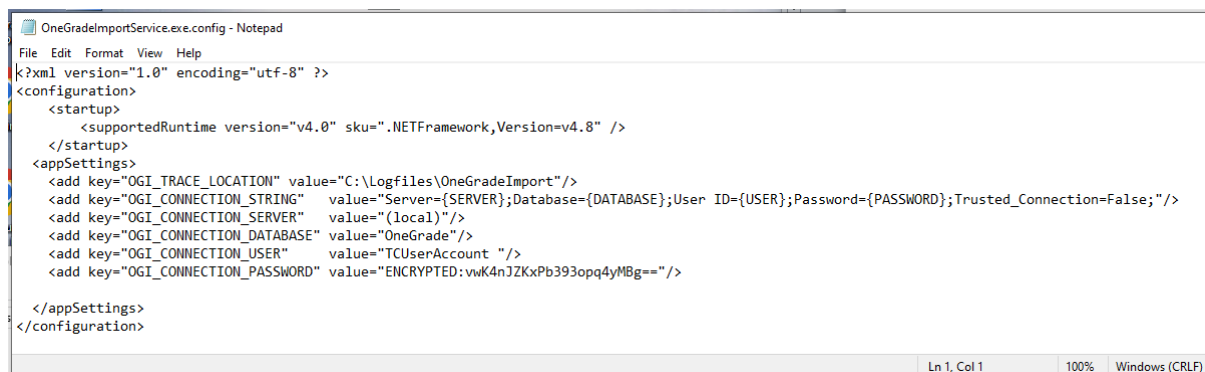
The OneGrade Import Service will now be displayed in the list of Services from where it can be stopped / started or restarted:



The OneGrade Import Service holds its database connection details within the OneGradeImportService.exe.config file in the location to which the OneGrade Import Service was installed:



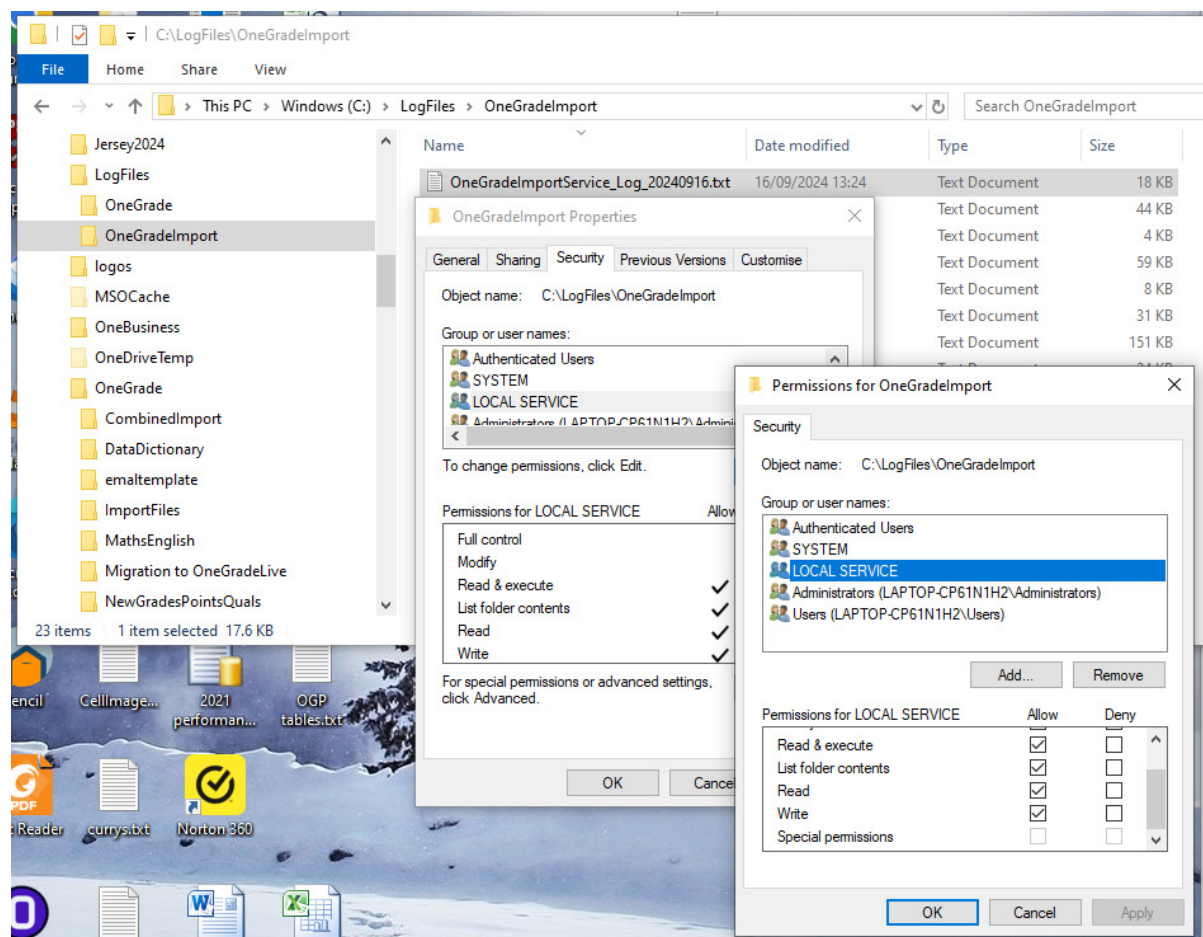
If these database connection details need to be altered, the file should be opened in Notepad and edited. To create the encrypted password text, use the utility available from the System Maintenance menu within the OneGrade Windows application.



If you make any changes to the OneGradeImportService.exe.config file, you will need to restart the OneGrade Import Services for the changes to take effect.

OneGradePlus Installation and Configuration

In order to use the tracing feature (for the Service to write to Log Files) , it is important that the account under which the OneGrade Import Service is running (usually the Local Service account) has Write access to the folder within which the log files will be written to and stored. The account under which the Service is running should have permission to write to the log file location by default, but if not, explicitly add the permission:



You will be able to tell if the OneGrade Import Service is writing log files because a file named OneGradeImportService_Log_YYYYMMDD.txt will be present in the log files folder location. (where YYYYMMDD is today's date)

Only the last 30 days log files will be retained in this folder location. Log files older than 30 days will be deleted.

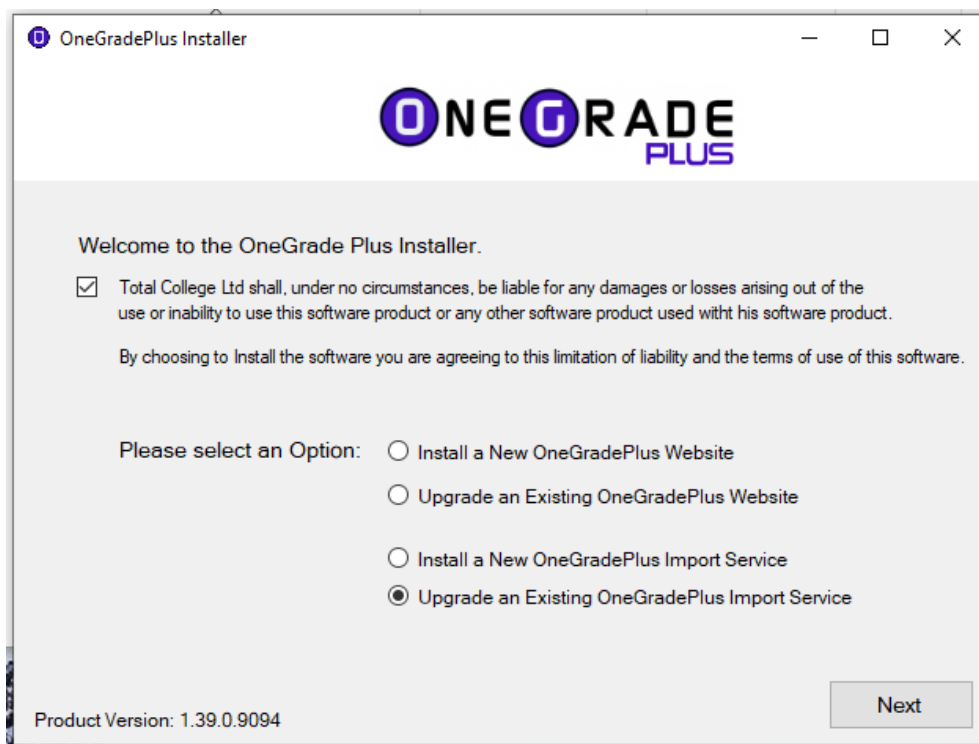
The OneGrade Import Service is designed to send an email via an SMTP Server (e.g. MS Exchange) after it has executed each job. To configure this, use the System Settings Values screen (from the System Maintenance menu) within the OneGrade Windows Application. Further details are available in the **Combined Import and Scheduler User Guide**.

OneGrade Import Service Upgrade

After extracting the installation files locally on the server on which IIS is installed, run the file OneGradePlusInstaller.exe:

	LogFiles	30/01/2024 14:26	File folder	
	OneGradePlus-Website	30/01/2024 14:26	File folder	
	Microsoft.Web.Administration.dll	08/03/2016 10:28	Application exten...	144 KB
	OneGradePlusInstaller.exe	30/01/2024 13:53	Application	316 KB
	OneGradePlusInstaller.exe.config	19/09/2023 15:23	XML Configuratio...	1 KB

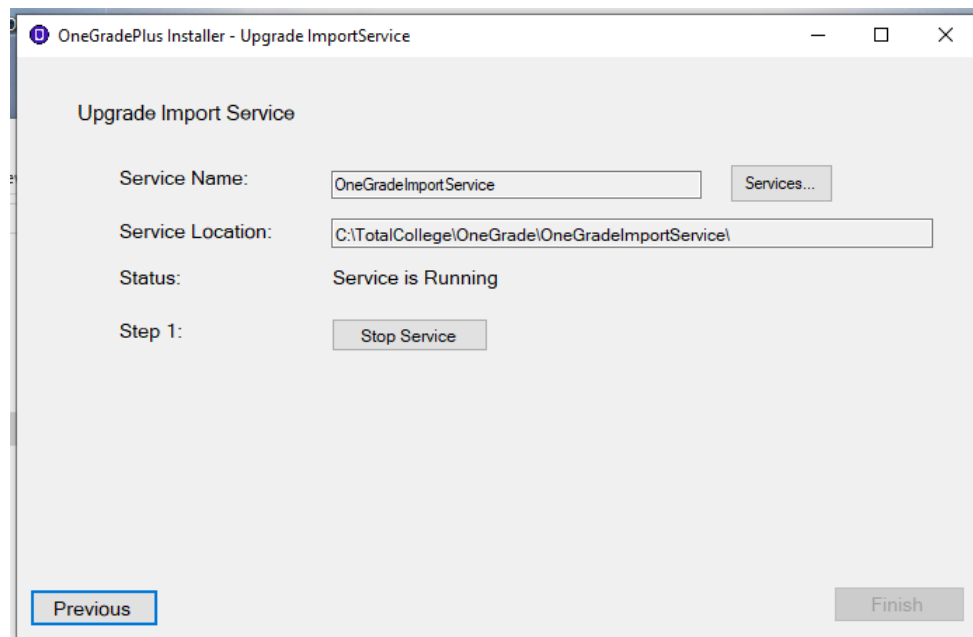
After ticking the Agreement checkbox, you will be asked to Install or Upgrade the OneGradePlus Import Service. Select to Upgrade the OneGradePlus Import Service and press Next:



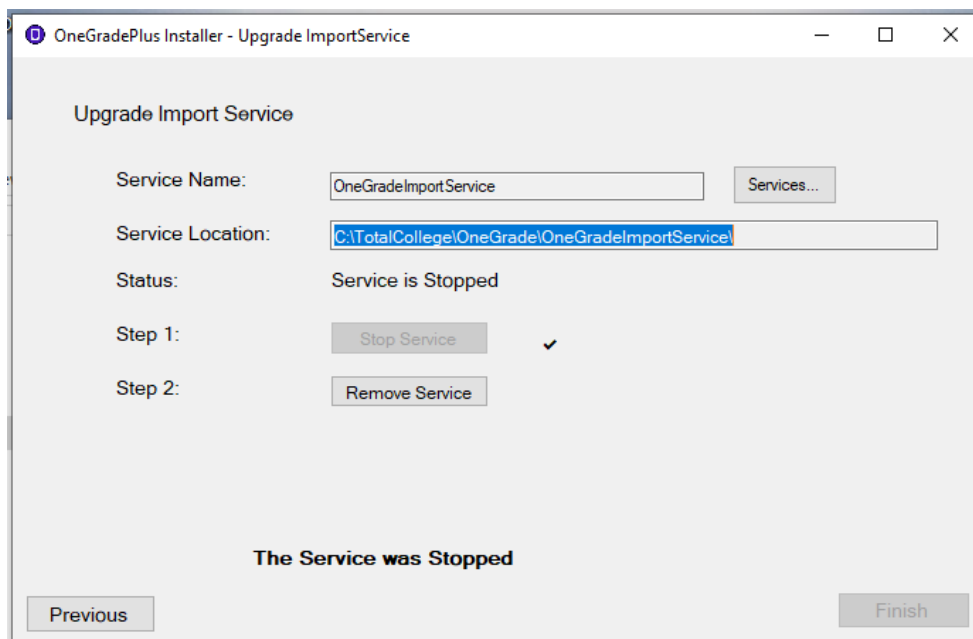
OneGradePlus Installation and Configuration

The upgrade is a 3-step process.

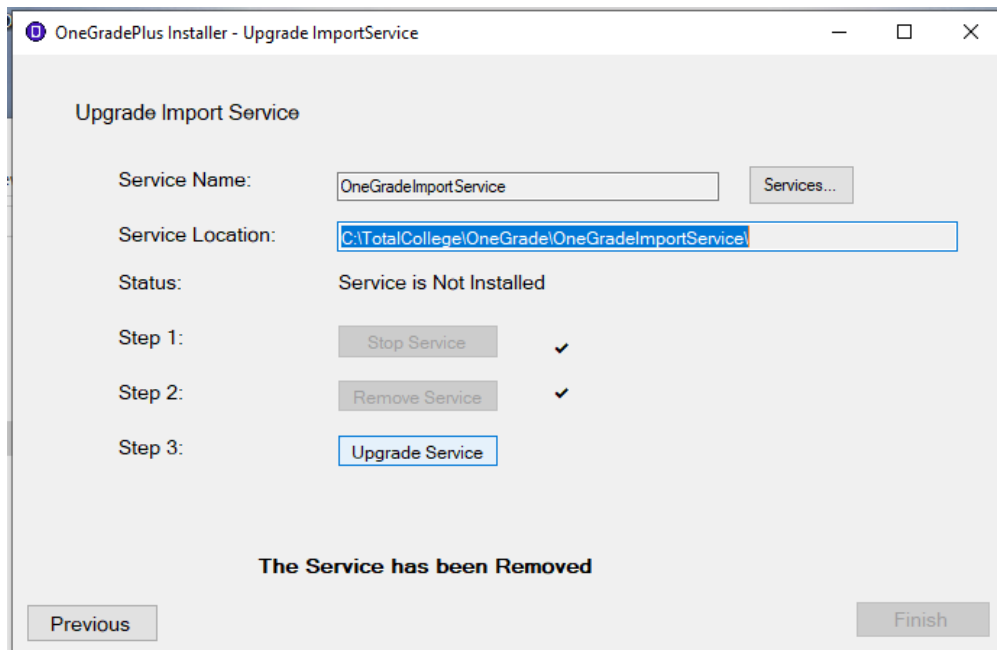
Step 1: Stop Service:



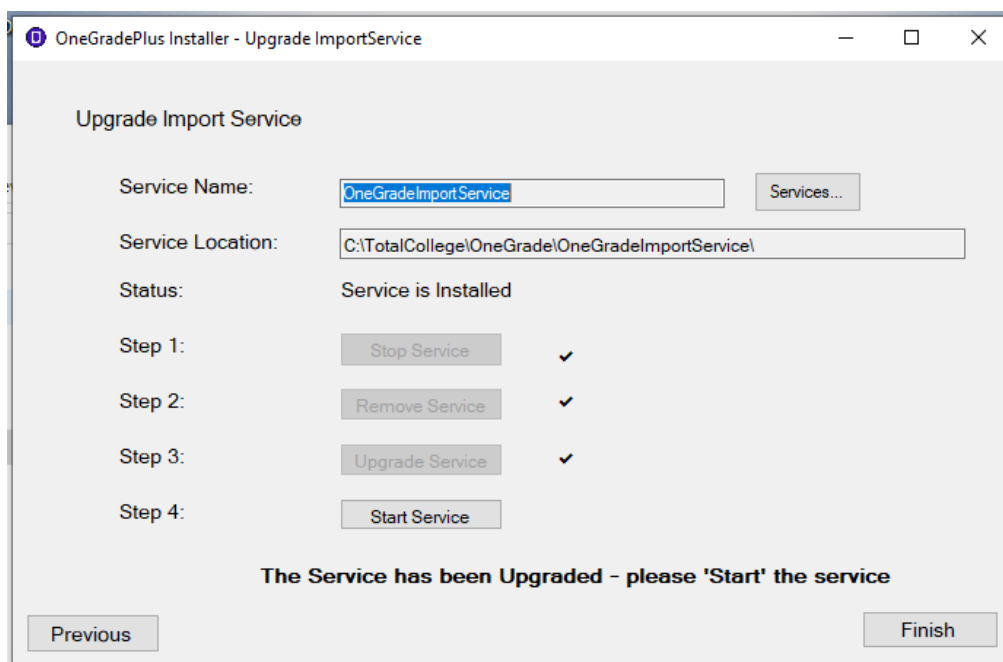
On success, Step 2: Remove Service:



On success, Step 3: Upgrade Service:

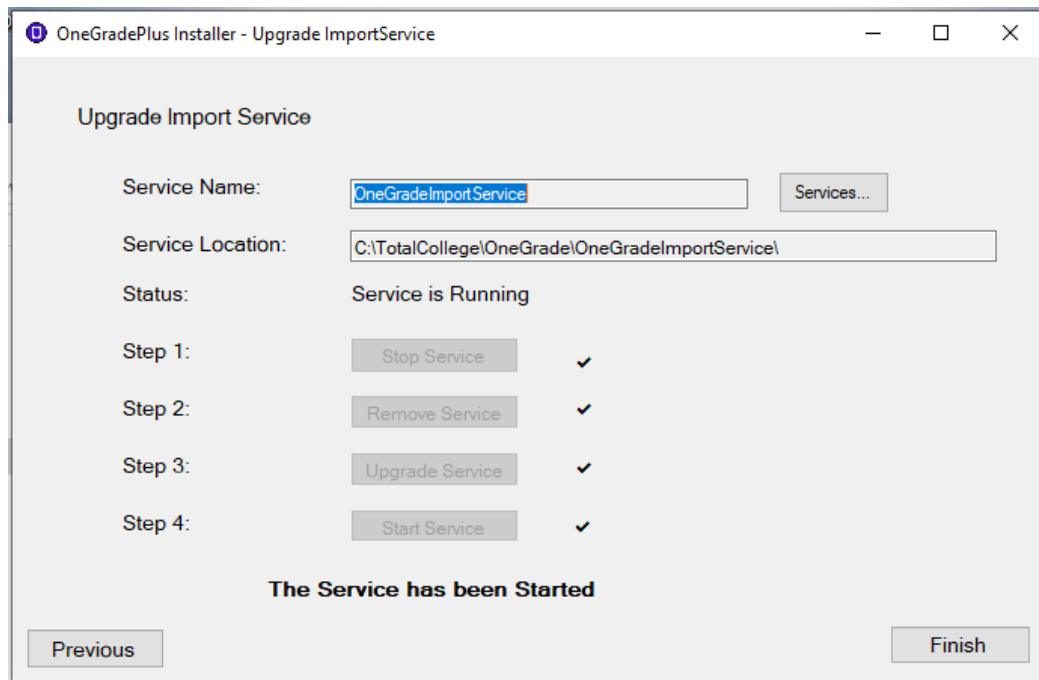


On success, Step 4: Start Service:



OneGradePlus Installation and Configuration

Once the Service has started, a message will be displayed and the Finish button will show:



Press Finish to complete the installation process:

